FINAL REPORT

20010374

GOOD LABORATORY PRACTICE (GLP) CERTIFICATION FOR THE CROP DEVELOPMENT CENTRE

April, 2004
Funded by the Agri-Food Innovation Fund

Prepared by: University of Saskatchewan

AGRI-FOOD INNOVATION FUND

Canada

Saskatchewan

105-00292/

Good Laboratory Practices (GLP) Certification for the Crop Development Centre

AFIF Project Number 20010374

Final Report

F.A. Holm, PAg.

Crop Development Centre

University of Saskatchewan

March, 2004

Summary:

GLP training has been completed, SOPs have been developed and approved, the Kernen Crop Research Farm facility has been upgraded to meet GLP standards and the first GLP trial was completed successfully in the summer of 2003. The Standards Council of Canada (SCC) has informed us that we have successfully completed all of the requirements for GLP certification which qualifies us to bid on appropriate GLP trials for the 2004 growing season.

Technical Report:

Objective:

To establish and maintain Good Laboratory Practice (GLP) certification by the SCC within the weed research program at the Crop Development Centre (CDC) to support the registration of pesticides under the minor use registration program.

Project Activities:

Staff Training: Initial staff training commenced in December 2002 with a GLP Training Workshop conducted by Vaughn Agricultural Research (VAR), an Ontatio based private research company with approximately 12 years of experience conducting GLP studies and previous experience in delivery of GLP training. The Workshop was held in Saskatoon on December 18 and 19, 2002 and was attended by staff from the Weed Control, Native Fruit and Pulse Pathology programs in the Crop Development Centre. In addition, staff from the Agri-Arm sites, Sask. Forage Council and the AAFC, Scott Research Farm were invited to attend and all were represented. Additional training was undertaken in March of 2004. A three day workshop on GLP for Field Studies and Quality Assurance was presented by Ms. Debbie Garvin, President of Pacific Rim Consulting / West Coast Quality Training. Sapsford, Stuber, Ife and Holm attended the 2 day Field Studies workshop. All but Holm attended the one day Quality Assurance training session. In addition to the formal training sessions, all four individuals have undertaken extensive reading of PMRA Regulatory Directives and OECD regulations / guidelines related to GLP studies.

Standard Operating Procedures: To achieve GLP certification, a set of Standard Operating Procedures (SOPs) must be developed and approved by the Standards Council of Canada (SCC). VAR was contracted to assist in the development of SOPs suitable for field research plot applications of herbicides, fungicides and insecticides using standard small plot sprayers. This has been completed and the SOPs have been approved by the SCC.

Facility Management and Compliance: There must be a clearly defined management plan for GLP trials with individuals identified for specific roles (Facility Manager, Principal Investigator, Study Personnel, Archivist, Back-up Archivist, Quality Assurance) and the research facilities must meet SCC standards for GLP trials. The required organizational chart has been prepared along with job descriptions and and CVs for all permanent staff involved in GLP trials. VAR was contracted to conduct a pre-inspection assessment of the Kernen Crop Research Farm facilities and advise on any corrective action that might be necessary to comply with GLP requirements. This was very useful

and of great help in preparing the facility for CSS inspection. The facility was inspected in April, 2003 and was approved subject to minor modifications that have been carried out. We now have facilities that meet SCC requirements for GLP trials.

Field Trail: In order to become GLP certified, the organization must successfully complete a GLP trial. Organizations cannot bid on PMRA minor use residue trials until certification has been achieved. A trial involving the application of Sevin XLR to tame mustard was completed in 2003.

The AAFC Research Farm at Scott, SK has been going through the same certification process and we collaborated very closely with staff from Scott in this exercise. We will continue this collaboration in order to maximize the efficiency of Saskatchewan's participation in the Minor Use Registration Program.

Personnel: The following personnel have worked on this project:

Name	Position	Source of Funds	Time on Project to Date
F. A. Holm	Facility Manager	U of Sask	2 month
K. Sapsford	Research Assistant	U. of Sask	4 months
G. Stuber	Technician	SAFRR- CDC Strategic	7 months
T. Ife	**Technician**	**AFIF/U of Sask**	**10 months**

VAR acted as the Study Director for our first GLP trial and a private consultant in Saskatoon was contracted to provide Quality Assurance inspection.

Equipment: The following equipment has been purchased to comply with GLP field trial requirements:

- Portable electronic weather station to collect weather data immediately adjacent to field trial sites.
- Temperature monitors for sample storage freezer and chemical storage room.
- Fire proof, lockable filing cabinets (2 x 2-drawer).
- Certified weights for electronic balance calibration.
- Certified pipettes and graduated cylinders.

Project Photos:

None. Not applicable to this project.

Innovation Fund Acknowledgement:

This is not a typical research project so has no tours, field days or publications have resulted. Thus, there has not yet been an opportunity to publicly acknowledge AFIF funding.

Project Public Information Materials:

GPL trials generate crop residue samples for laboratory analysis by a third party laboratory that is used to support product registration on the crop. As such, they do not generate information or data for direct public consumption.